EX. 5

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O K L A H O M A
DEPARTMENT OF ENVIRONMENTAL QUALITY

MARK COLEMAN
Executive Director

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY

FRANK KEATING
Governor

JUN 27 2001

Oklahoma Gas & Electric
Attn: David Branecky, Environmental Administrator
P. O. Box 321
Oklahoma City, OK 73101

Re: Permit Application No. 97-136-TV
Muskogee Generating Station
Muskogee County, Oklahoma

Dear Mr. Branecky:

Enclosed is the permit authorizing operation of the referenced facility. Please note that this permit is issued subject to certain standard and specific conditions which are attached.

Thank you for your cooperation in this matter. If we may be of further service, please contact our office at (405) 702-4100.

Very truly yours,

David S. Schutz

David S. Schutz, P.E.
New Source Permits Section
AIR QUALITY DIVISION

Enclosure

cc: Muskogee County DEQ Office

PERMIT

AIR QUALITY DIVISION
STATE OF OKLAHOMA
DEPARTMENT OF ENVIRONMENTAL QUALITY
707 N. ROBINSON STREET, SUITE 4100
P.O. BOX 1677
OKLAHOMA CITY, OKLAHOMA 73101-1677

Date JUN 27 2001

Permit No. 97-136-TV

Oklahoma Gas & Electric, having complied with the requirements of the law, is hereby granted permission to operate a coal-fired electric generation plant in Sections 21, 22, 27, and 28, T15N, R19E Muskogee, Muskogee County, Oklahoma,

subject to the following conditions, attached:

[X] Standard Conditions Dated June 1, 2001

[X] Specific Conditions

Director, Air Quality Division

DEQ Form 885
Revised 7/93

PERMIT TO OPERATE
AIR POLLUTION CONTROL FACILITY
SPECIFIC CONDITIONS

Oklahoma Gas & Electric Company
Muskogee Generating Station

Permit Number 97-136-TV

The permittee is authorized to operate in conformity with the specifications submitted to Air Quality on March 5, 1997, with supplemental information received October 6, 2000. The Evaluation Memorandum dated June 25, 2001 explains the derivation of applicable permit requirements and estimates of emissions; however, it does not contain operating permit limitations or permit requirements. Continuing operations under this permit constitutes acceptance of, and consent to, the conditions contained herein.

1. Points of emissions and emissions limitations for each point: [OAC 252:100-8-6(a)]

EUG 2 Grandfathered Boiler: The emissions are "grandfathered" and limited to the existing equipment as it is.

EU ID#	Point ID#	EU Name/Model	Construction Date
2-B	01	Unit 3 Boiler, 1,690 MMBTUH, Babcock & Wilcox, S/N RB-237	1956

A. The permittee shall conduct daily Method 9 or Method 22 visual observations of the boiler exhausts for at least 12 minutes while burning No. 2 fuel oil for more than 24 continuous hours and keep a record of these observations. If visible emissions are detected, then the permittee shall conduct a thirty-minute opacity reading in accordance with EPA Reference Method No. 9.

i. When four consecutive daily visible emission observations or Method 9 observations show no visible emissions, or no emissions of a shade or density greater than twenty (20) percent equivalent opacity, respectively, the frequency may be reduced to weekly visual observations, as above. Upon any showing of non-compliance the observation frequency shall revert to daily.

ii. If a Method 9 observation exceeds 20% opacity the permittee shall conduct at least two additional Method 9 observations within the next 24-hours.

iii. If more than one six-minute Method 9 observation exceeds 20% opacity in any consecutive 60 minutes; or more than three six-minute Method 9 observations in any consecutive 24 hours exceeds 20% opacity; or if any six-minute Method 9 observation exceeds 60% opacity; the owner or operator shall comply with the provisions for excess emissions during start-up, shut-down, and malfunction of air pollution control equipment. [OAC 252:100-25]

EUG 2A Insignificant Boiler: The following emissions unit is considered insignificant since emissions are less than 5 TPY of any pollutant.

EU ID#	Point ID#	EU Name/Model	Construction Date
2-B	02	Auxiliary Boiler, 12.7 MMBTUH	1982

EUG 3 1972 Boilers:

A. Boilers No. 4 and 5 shall have the following emission limitations:
[40 CFR 60.42(a)(1), 43(a)(2), and 44(a)(3)]

Emission Unit	PM lbs/MMBTU	SO_2 lbs/MMBTU	NO_X lbs/MMBTU	Opacity* %
3-B-01	0.10	1.2	0.7	20
3-B-02	0.10	1.2	0.7	20

* opacity shall be limited to 20% except for one six minute period per hour of not more than 27%.
[40 CFR 60.42(a)(2)]

B. Boilers 4 and 5 are subject to NSPS Subpart D and shall comply with all applicable requirements.
[OAC 252:100-4]

C. The permittee shall operate and maintain the continuous monitoring systems for Boiler 4 and 5 using the applicable methods and procedures set forth and shall record the output of the systems.
[40 CFR 60.45(a)]

D. Boilers 4 and 5 are authorized to utilize coal as primary fuel and natural gas as startup fuel.
[OAC 252:100-31]

E. The permittee shall comply with the reporting and recordkeeping requirements of 40 CFR 60.4(b)

F. Compliance with the SO_2 lb/MMBTU emission limits in Specific Condition 1 shall be determined on the basis of the average emission rate for three successive boiler operating hours, a 3-hour rolling average.
[40 CFR 60.43]

G. Compliance with the NO_X lb/MMBTU emission limits shall be determined on the basis of the average emission rate for a 3-hour rolling average. [OAC 252:100-33]

EUG 4 Permitted Boiler No. 6

EU ID#	Point ID#	EU Name/Model	Construction Date
4-B	01	Unit 6 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N AA-B0001	1978

B. The above unit is subject to emissions limitations as follow: [OAC 252:100-8-5(d)]

Emission Unit	PM lb/hr	SO_2 lb/hr	NOx lb/hr	VOC lb/hr	CO lb/hr
4-B-01	212.0	6576.0	3605.0	390.00	180.0

C. Boiler No. 6 shall have the following emission limitations:
[40 CFR 60.429(a)(1), 43(a)(2), and 44(a)(3)]

Emission Unit	SO_2 lbs/MMBTU	NO_X lbs/MMBTU	Opacity* %
4-B-01	1.2	0.7	20

* opacity shall be limited to 20% except for one six minute period per hour of not more than 27%.
[40 CFR 60.42(a)(2)]

D. Boiler 6 (4-B-01) is subject to NSPS Subpart D and shall comply with all applicable requirements including those in Specific Condition 1. [OAC 252:100-4]

E. The permittee shall operate and maintain the continuous monitoring systems for Boiler 6 (4-B-01) using the applicable methods and procedures set forth and shall record the output of the systems.
[40 CFR 60.45(a)]

F. Boiler 6 (4-B-01) is authorized to utilize coal as primary fuel and natural gas as startup fuel.
[OAC 252:100-31]

G. The permittee shall comply with the reporting and recordkeeping requirements of 40 CFR 60.49b.

H. Compliance with the SO_2 lb/MMBTU emission limits in Specific Condition 1 shall be determined on the basis of the average emission rate for three successive boiler operating hours, a 3-hour rolling average.
[40 CFR 60.43]

I. Compliance with the NO_X lb/MMBTU emission limits shall be determined on the basis of the average emission rate for a 3-hour rolling average. [OAC 252:100-33]

EUG 5 Coal Piles: The emissions are "grandfathered" and limited to the existing equipment as it is.

EU ID#	Point ID#	EU Name/Model	Construction Date
5-B	01	Coal Piles	1972

EUG 6A Coal Unloading and Processing: The emissions are "grandfathered" and limited to the existing equipment as it is.

EU ID#	Point ID#	EU Name/Model	Construction Date
6-B	01	Rotary Coal Car Dumper	1972
6-B	02	Radial Stacker from Car Dumpter	1972
6-B	03	Reclaim Conveyor (Units 4 & 5)	1972
6-B	04	Crusher (Units 4 & 5)	1972
6-B	05	Tripper Gallery (Units 4 & 5)	1972

EUG 6B Coal Unloading & Processing: The following emissions units are subject to emissions limitations as shown.

EU ID#	Point ID#	EU Name/Model	PM Emissions	
			lb/hr	TPY
6-B	07	Reclaim Conveyor (Unit 6)	12.00	26.28
6-B	10	Crusher (Unit 6)	0.01	0.05
6-B	11	Transfer Tower #3 (Unit 6)	0.01	0.01
6-B	12	Surge Bin (Unit 6)	0.01	0.03
6-B	13	Tripper Gallery	0.01	0.03
6-B	06	Linear Stacker ~~(Units 4 & 5)~~	0.01	0.01
6-B	08	Transfer Tower #1 ~~(Units 4 & 5)~~	0.01	0.03
6-B	09	Transfer Tower #2 ~~(Units 4 & 5)~~	0.01	0.03

A. The owner or operator shall comply with all applicable NSPS Subpart Y requirements of 40 CFR Part 60 for coal processing equipment serving Unit 6 which was constructed, reconstructed, or modified after October 24, 1974.

[OAC 252:100-4 and 40 CFR 60.250 to 60.254]

B. Operations 6-B-10, 11, 12, and 13 shall vent exhausts to fabric filters or equivalent devices with at least 99% control efficiency for PM. [OAC 252:100-8-6(a)]

C. The permittee shall water coal in Operation 6-B-07 when needed to control fugitive dust emissions to 20% or less. [OAC 252:100-25 and 40 CFR 60.252(c)]

D. The permittee shall conduct Method 22 visual observations of emissions from the discharges from each of the above units at least once per week. In no case shall the observation period be less than six minutes in duration. If visible emissions are observed for six minutes in duration for any observation period and such emissions are not the result of a malfunction, then the permittee shall conduct, for the identified points, within 24 hours, a visual observation of emissions, in accordance with 40 CFR Part 60, Appendix A, Method 9.

i. When four consecutive daily visible emission observations or Method 9 observations show no visible emissions, or no emissions of a shade or density greater than twenty (20) percent equivalent opacity, respectively, the frequency may be reduced to weekly visual observations, as above. Upon any showing of non-compliance the observation frequency shall revert to daily.

ii. If a Method 9 observation exceeds 20% opacity the permittee shall conduct at least two additional Method 9 observations within the next 24-hours.

iii. If more than one six-minute Method 9 observation exceeds 20% opacity in any consecutive 60 minutes; or more than three six-minute Method 9 observations in any consecutive 24 hours exceeds 20% opacity; or if any six-minute Method 9 observation exceeds 60% opacity; the owner or operator shall comply with the provisions for excess emissions during start-up, shut-down, and malfunction of air pollution control equipment. [OAC 252:100-25]

EUG 7 Flyash Storage: The following emissions unit is considered insignificant since emissions are less than 5 TPY of any pollutant.

EU ID#	Point ID#	EU Name/Model	Construction Date
7-B	01	Fly Ash Silo	1972
7-B	02	Fly Ash Silo	1972
7-B	03	Fly Ash Silo	1982
7-B	04	Fly Ash Silo	1978

EUG 8 Liquid Fuel Storage: The following emissions units are considered insignificant since emissions are less than 5 TPY of any pollutant.

EU ID#	Point ID#	EU Name/Model	Capacity (Gallons)	Construction Date
8-B	01	Gasoline	2,000	1972
8-B	02	Diesel (machine shop)	11,900	1975
8-3	03	Diesel (heavy equipment)	5,800	1979
8-B	04	Diesel (heavy equipment)	10,000	1976
8-B	05	Diesel (Unit 3 auxiliary generator)	750	1956
8-B	06	Diesel (Unit 3 fire pump)	200	1997
8-B	07	Diesel (Unit 4 fire pump)	300	1997
8-B	08	Diesel (Unit 6 auxiliary generator)	400	1982
8-B	09	Diesel (Unit 4 auxiliary generator)	500	1997 ✓
8-B	10	Diesel (Unit 5 auxiliary generator)	500	1998
8-B	11	Liquid fuel day tank	40,000	1956

EUG 9 Insignificant Engines: The following emissions units are considered insignificant.

EU ID#	Point ID#	EU Name/Model	Serial Number	Capacity (HP)	Construction Date
9-B	01	Detroit Diesel Model 5117982	12VA-11595	710	1970
9-B	02	Cummins Series 403	44944535	200	1975
9-B	03	Cummins Model NT855-F2	10946353	340	1979
9-B	05	Waukesha Model F-2896	288522	710	1976
9-B	04	Waukesha Model F-2896 DSIM	288523	710	1976
9-B	06	Detroit Diesel Model 81637300	16VF002836	710	1997

2. Boilers 4, 5, and 6 (3-B-01, 3-B-02, and 4-B-01) are authorized to combust non-hazardous waste, on an as-needed basis, generated on-site, from other OG&E facilities, or from OG&F employees and retired employees as or when authorized pursuant to 40 CFR Part 279.

A. The waste combusted will be wastewater treatment sludge, used oil-dry, used oil, used solvent, used anti-freeze, boiler cleaning solution (EDTA), activated carbon, demineralizer resin, slop oil and ash collected from oil combustion. [OAC 252:100-31]

B. Emissions of mercury from water treatment sludge combustion shall not exceed 3,200 grams per day. The permittee may demonstrate, using the approved methods, that mercury present in sludge does not equal 3,200 grams per day. [40 CFR 61.52(b)]

C. Prior to burning any waste water treatment sludge, the permittee shall conduct testing of the mercury content of water treatment sludges. Testing shall be conducted using either Method 105 of 40 CFR 61 Appendix B, or by Method 7471A of SW-846, "Test Methods for Evaluating Solid Waste" as approved by EPA on September 28, 2000. [40 CFR 61.54(a) and 40 CFR 60.13(h)]

3. The permittee shall be authorized to operate the facility continuously (24 hours per day, every day of the year). [OAC 252:8-6(a)]

4. The facility is subject to the Acid Rain Program and shall comply with all applicable requirements including the following: [40 CFR 75]

A. SO_2 allowances and NOx limits as listed in Acid Rain Permit
B. Report quarterly emissions to EPA per 40 CFR 75.
C. Conduct RATA tests per 40 CFR 75.
D. QA/QC plan for maintenance of the CEMS.

5. The records of operations shall be maintained on-site for at least five years after the date of recording and shall be provided to regulatory personnel upon request. [OAC 252:8-6(a)(3)(b)]

A. Acid Rain CEMS data and opacity monitor data for Units 4, 5 and 6.
B. Quantities of fuel and waste products burned by type (annual).
C. ~~Amounts of wastewater treatment sludges and mercury content of those sludges for each~~ event of sludge being burned.
D. Visible emission testing for Unit 3 for times when liquid fuels are burned.

6. The following emissions controls shall be utilized on the following emissions points:
[OAC 252:100-8-6]

Unit Designation	Description	Emissions Control Methods
5-B-01	Coal piles	Water spray
6-B-01	Rotary coal car dumper	Water spray
6-B-02	Radial coal stacker	Water spray

7. The following records shall be maintained on-site to verify insignificant activities.
[OAC 252:8-6(a)(3)(b)]

A. Stationary reciprocating engines: number of hours operated for each generation engine in EUG No. 9 (monthly and calendar year).
B. Fuel storage/dispensing equipment: gasoline purchases for Tank 8-B-1 (monthly and calendar year).

8. This permit supersedes all previous Air Quality permits except for Acid Rain Permit No. 97-136-AR for this facility which are now null and void.

9. The Permit Shield (Standard Conditions, Section VI) is extended to the following requirements that have been determined to be inapplicable to this facility.[OAC 252:100-8-6(d)(2)]

A. OAC 252:100-11 Alternative Emissions Reduction
B. OAC 252:100-15 Mobile Sources
C. OAC 252:100-23 Cotton Gins
D. OAC 252:100-24 Grain Elevators
E. OAC 252:100-39 Nonattainment Areas
F. OAC 252:100-47 Landfills

OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

MEMORANDUM **June 25, 2001**

TO: DPL Dawson Lasseter, Chief Engineer, Air Quality Division

THROUGH: PF Phillip Fielder, P.E., New Source Permits Unit

THROUGH: EM Eric Milligan, E.I., New Source Permits Unit

THROUGH: RK Peer Review

FROM: DS David Schutz, P.E., New Source Permits Unit

SUBJECT: Evaluation of Permit Application No. **97-136-TV**
Oklahoma Gas & Electric Company
Muskogee Generating Station
Sections 21, 22, 27 and 28, T15N, R19E, Muskogee County
Located Near Muskogee on Hwy. 62 on the East Bank of the Arkansas River

SECTION I. INTRODUCTION

Oklahoma Gas & Electric Company (OG&E) submitted an application for a Part 70 operating permit for its Muskogee Generating station on March 5, 1997. The Muskogee Generating Station utilizes sub-bituminous coal, natural gas, fuel oils (both distillate and residual), and some waste products (used oil-sorb, used antifreeze, used solvents, used oil, chemical cleaning wastes, hazardous waste fuel, activated carbon, demineralizer resin, and waste water treatment sludge) to produce electricity (SIC 4911). The facility includes 4 large boiler units and auxiliary facilities for storage and processing of solid and liquid fuels and for handling ash and other wastes. The Muskogee facility currently uses natural gas as a start-up fuel and sub-bituminous low-sulfur Wyoming coal as the primary fuel. None of the boilers are designed to operate on oil continuously.

The facility became commercially operational in 1956 and currently operates under Permit No. 77-084-O. OG&E has obtained Applicability Determinations for the incineration of some waste products. The facility is a Phase II source for the Acid Rain Program and is located in an attainment area.

SECTION II. FACILITY DESCRIPTION

The primary air pollution emitting operations are four large boiler units in electrical generation service. These units are summarized below. Unit 3 is a gas-fired boiler, while Units 4, 5, and 6 are coal-fired units. Units 1 and 2, the oldest units, are being demolished.

Fuel oil is stored in one 40,000-gallon storage tank, a tank constructed in 1956, and is fed into Unit 3 by pipeline. In addition, OG&E combusts small amounts of waste products from the Muskogee Generating Station and other OG&E facilities in the boilers.

There are three operating scenarios for the facility. For Scenario I, Boilers 4, 5, and 6 are fired only with coal and Unit 3 and the Auxiliary Boiler are fired with natural gas. For Scenario II, minor amounts of wastes are added to the coal and burned. This has a negligible effect on overall emissions, therefore, the two scenarios will be considered to have identical emission rates. In Scenario III, No. 6 fuel oil is used in Unit 3.

BOILER UNITS AT THE MUSKOGEE GENERATING STATION

Boiler Unit	Capacity	Construction Date	Primary Fuel	Auxiliary Fuels
Unit 3 (2-B-01)	1690 MMBTUH	1956	Natural Gas	Residual oil
Unit 4 (3-B-01)	5480 MMBTUH	1970	296 TPH Coal	Waste hydrocarbon liquids, oil-sorb, solvents, wastewater treatment sludge, activated carbon, demineralizer resin, and natural gas
Unit 5 (3-B-02)	5480 MMBTUH	1970	296 TPH Coal	Waste hydrocarbon liquids, oil-sorb, solvents, wastewater treatment sludge, activated carbon, demineralizer resin, and natural gas
Unit 6 (4-B-01)	5480 MMBTUH	1978	296 TPH Coal	natural gas
Auxiliary Boiler (2-B-02)	12.7 MMBTUH	1956	12,700 SCFH gas	None

Coal is transported to the facility from Wyoming by railroad. A rotary coal car dumper empties railcars onto conveyor belts. These conveyors transport coal to a large pile. Reclaim conveyors move coal as-received to crushers via transfer towers. Coal is reduced in size at the crusher and screened before being conveyed to "tripper galleries" (storage silos) and then to boilers as fuel. Unit 6 also has an intermediate surge bin for pulverized coal.

In addition to the primary emission units, there are several support units for fuel and ash handling and storage:

AUXILIARY UNITS

Unit Designation	Description	Construction Date	Capacity	Emissions Control Methods
8-B-02	Oil fuel tank	1956	40,000 gallons	None
6-B-01	Rotary coal car dumper	1972	3,000 TPH	Water spray
6-B-02	Radial coal stacker	1972	3,000 TPH	Water spray
5-B-01	Coal piles	1972	--	Water spray
6-B-03	Coal reclaim conveyor	1972	1,200 TPH	Baghouses
6-B-08	Coal transfer tower #1	1978	600 TPH	Baghouses
6-B-09	Coal transfer tower #2	1978	600 TPH	Baghouses
6-B-11	Coal transfer tower #3	1978	300 TPH	Baghouses
6-B-06	Linear coal stacker	1978	1,200 TPH	Water spray
6-B-07	Coal reclaim conveyor	1978	1,200 TPH	Baghouses
6-B-04	Coal crusher (for Boilers 4 and 5)	1972	600 TPH	Baghouses
6-B-10	Coal crusher (for Boiler 6)	1978	300 TPH	Baghouses
6-B-05	Tripper gallery (for Boilers 4 and 5)	1972	600 TPH	Baghouses
6-B-13	Tripper gallery (for Boiler 6)	1978	300 TPH	Baghouses
6-B-12	Coal surge bin (for Boiler 6)	1978	--	Baghouses
7-B-01	Ash silo	1972	--	Closed system
7-B-02	Ash silo	1972	--	Closed system
7-B-03	Ash silo	1982	--	Closed system
7-B-04	Ash silo	1978	--	Closed system
5-B-01	Unpaved roads	1956	--	Water spray

Units 4, 5, and 6 can each potentially combust approximately 300 tons per hour of coal to produce 3.8 million pounds per hour of steam each. These units have a design maximum of 550 MW electrical output. During the combustion process, fly ash is collected by electrostatic precipitators. The precipitators are designed to remove 99.52% of the fly ash from the flue gas and collect it in hoppers. The fly ash is then pneumatically conveyed to the silos where it is stored.

The auxiliary boiler uses natural gas to provide steam, as required, to the building heating systems.

SECTION III. EQUIPMENT

EUG 1	Facility Wide		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
None	None	Facility	<1956

EUG 2	Grandfathered Boiler		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
2-B	01	Unit 3 Boiler, 1,690 MMBTUH, Babcock & Wilcox, S/N RB-237	1956

EUG 2A	Insignificant Boiler		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
2-B	02	Auxiliary Boiler, 12.7 MMBTUH, S/N 82-14776H-84960	1982

EUG 3	1972 Boilers		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
3-B	01	Unit 4 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N 8372	1972
3-B	02	Unit 5 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N 8472	1972

EUG 4	1978 Boiler		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
4-B	01	Unit 6 Boiler, 5,480 MMBTUH, Combustion Engineering, S/N AA-B0001	1978

EUG 5	Coal Piles		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
5-B	01, 02, 03, 04	Coal Pile	1972

EUG 6A	Coal Unloading & Processing		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
6-B	01	Rotary Coal Car Dumper	1972
6-B	02	Radial Stacker from Car Dumpter	1972
6-B	03	Reclaim Conveyor (Units 4 & 5)	1972
6-B	04	Crusher (Units 4 & 5)	1972
6-B	05	Tripper Gallery (Units 4 & 5)	1972

EUG 6B	Coal Unloading & Processing		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
6-B	07	Reclaim Conveyor (Unit 6)	1978
6-B	10	Crusher (Unit 6)	1978
6-B	11	Transfer Tower #3 (Unit 6)	1978
6-B	12	Surge Bin (Unit 6)	1978
6-B	13	Tripper Gallery	1978
6-B	06	Linear Stacker (Units 4 & 5)	1978
6-B	08	Transfer Tower #1 (Units 4 & 5)	1978
6-B	09	Transfer Tower #2 (Units 4 & 5)	1978

EUG 7	Fly Ash Storage		
EU ID#	**Point ID#**	**EU Name/Model**	**Construction Date**
7-B	01	Fly Ash Silo	1972
7-B	02	Fly Ash Silo	1972
7-B	03	Fly Ash Silo	1972
7-B	04	Fly Ash Silo	1972

EUG 8	Fuel Tanks			
EU ID#	**Point ID#**	**EU Name/Model**	**Capacity (Gallons)**	**Construction Date**
8-B	01	Gasoline	2,000	1972
8-B	02	Diesel (machine shop)	11,900	1975
8-B	03	Diesel (heavy equipment)	5,800	1979
8-B	04	Diesel (heavy equipment)	10,000	1976
8-B	05	Diesel (Unit 3 auxiliary generator)	750	1956
8-B	06	Diesel (Unit 3 fire pump)	200	1997
8-B	07	Diesel (Unit 4 fire pump)	300	1997
8-B	08	Diesel (Unit 6 auxiliary generator)	400	1982
8-B	09	Diesel (Unit 4 auxiliary generator)	500	1997
8-B	10	Diesel (Unit 5 auxiliary generator)	500	1998
8-B	11	Liquid fuel day tank	40,000	1956

EUG 9 Insignificant Engines					
EU ID#	**Point ID#**	**EU Name/Model**	**Serial Number**	**Capacity (HP)**	**Construction Date**
9-B	01	Detroit Diesel Model 5117982	12VA-11595	710	1970
9-B	02	Cummins Series 403	44944535	200	1975
9-B	03	Cummins Model NT855-F2	10946353	340	1979
9-B	05	Waukesha Model F-2896	288522	710	1976
9-B	04	Waukesha Model F-2896 DSIM	288523	710	1976
9-B	06	Detroit Diesel Model 81637300	16VF002836	710	1997

The last two engines were constructed after October, 1972, and have emissions in excess of 5 TPY based on 500 hours operating. However, the "Insignificant Activities" list does not state the 5 TPY level nor an upper bound to horsepower for emergency generators. The addition is exempt from PSD review based on the September 6, 1995 EPA memo, "Calculating Potential to Emit for Emergency Generators" which states that 500 hours is an appropriate default for estimating emissions from these sources. All equipment is, therefore, in compliance with permitting requirements.

Stack Parameters

Point	Height Feet	Diameter feet	Flow ACFM	Temperature °F
Boiler 3	176	15.4	339539	300
Boiler 4	350	24	1259309	264
Boiler 5	350	24	1259309	264
Boiler 6	500	21.5	1803588	264

SECTION IV. EMISSIONS

Emission estimates reflect continuous operations (8,760 hr/yr) using emission factors as follow:

- Auxiliary boiler: gas fuel emissions factors from AP-42 (7/98) for boilers smaller than 100 MMBTUH: 0.10 lb/MMBTU NOx, 0.084 lb/MMBTU CO, 0.0055 lb/MMBTU VOC, 0.0076 lb/MMBTU PM, and 0.0006 lb/MMBTU SO_2.
- Boiler 3: gas fuel emissions factors from AP-42 (7/98) for boilers larger than 100 MMBTUH and pre-NSPS: 0.28 lb/MMBTU NOx, 0.084 lb/MMBTU CO, 0.0055 lb/MMBTU VOC, 0.0076 lb/MMBTU PM, and 0.0006 lb/MMBTU SO_2; oil fuel emissions from AP-42 (9/98) for boilers larger than 100 MMBTUH burning No. 6 fuel oil: 47 lb/Mgal NOx, 5 lb/Mgal CO, 0.76 lb/Mgal VOC, 3.63 lb/Mgal PM, and 7.07 lb/Mgal SO_2 (assuming 0.045% sulfur in fuel oil).

- Boilers 4 and 5: coal-firing emissions factors as follows: NOx, 0.70 lb/MMBTU (from Subchapter 33), CO, 0.5 lb/ton [AP-42 (9/98), Section 1.1], VOC 0.05 lb/ton [AP-42 (9/98), Section 1.1 for pulverized coal], PM_{10}, 0.10 lb/MMBTU (from Subchapter 19), and SO_2, 1.2 lb/MMBTU (from Subchapter 31).
- Boiler 6: coal-firing emissions factors as follows: NOx, 0.70 lb/MMBTU (from Subchapter 33), CO, 0.5 lb/ton [AP-42 (9/98), Section 1.1], VOC 0.05 lb/ton [AP-42 (9/98), Section 1.1 for pulverized coal], PM_{10}, 0.039 lb/MMBTU (derived from a 1978 BACT determination), and SO_2, 1.2 lb/MMBTU (from Subchapter 31).
- Coal piles: PM emissions were taken from EPA Region VIII's "Compilation of Past Practices and Interpretations by EPA on Air Quality Review of Surface Mining Operations" for coal processing: 0.2 lb/ton each for crushing, screening, and stacking, and 0.02 lb/ton for conveying operations.
- Coal processing: PM emissions were taken from EPA Region VIII's "Compilation of Past Practices and Interpretations by EPA on Air Quality Review of Surface Mining Operations" for coal processing: 0.2 lb/ton each for crushing, screening, and stacking, and 0.02 lb/ton for conveying operations, and assuming 99.9% control efficiency of fabric filters.
- Ash handling: PM emissions were calculated based on AP-42 (1/95) Section 11.8 for ash handling (110 lb/ton) assuming 99.9% control efficiency for baghouses on the ash silos.
- Fuel tanks emissions were calculated using the EPA "TANKS2" computer program
- Engine emissions were taken from AP-42 (10/96) Section 3.3: NOx 0.031 lb/hp-hr; CO, 0.00668 lb/hp-hr; SO_2, 0.00205 lb/hp-hr; PM_{10}, 0.0022 lb/hp-hr; and VOC, 0.00247 lb/hr-hr.
- Toxic pollutants from coal burning: factors in AP-42 (9/98) Section 1.1.
- Toxic pollutants from fuel oil burning: factors in AP-42 (9/98) Section 1.3.

The maximum emissions of mercury from sludge burning were stated as the NESHAP Subpart E limitation of 3,200 grams per day (0.294 lb/hr). These rates do not take into account the control efficiency of the boilers' electrostatic precipitators, normally expected to be 50% or more.

WASTE MATERIALS BURNED IN 1995

Waste Materials Burned	Quantities
Used oil	5,542 gallons
Oil dry	10,942 pounds
Used anti-freeze	175 gallons

Potential coal usage is approximately 8 million tons per year. The waste materials constitute approximately 1 millionth of the total fuel used. Combustion of waste materials is subject to rules and regulations 40 CFR Parts 266 and 279 and OAC 252:205.

POTENTIAL FACILITY EMISSIONS
SCENARIOS I AND II

Emission	PM_{10}		SO_2		NOx		VOC		CO	
Unit	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
2-B-01	12.84	56.26	1.01	4.44	473.2	2072.6	9.30	40.71	141.96	621.78
2-B-02	0.10	0.42	0.01	0.03	1.27	5.56	0.07	0.31	1.07	4.67
3-B-01	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.00	657.00
3-B-02	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.00	657.00
4-B-01	212.00	928.56	6576.0	28802.9	3605.0	15789.9	15.00	65.70	150.00	657.00
5-B-01	60.00	19.71	--	--	--	--	--	--	--	--
5-B-02	60.00	19.71	--	--	--	--	--	--	--	--
5-B-03	60.00	19.71	--	--	--	--	--	--	--	--
5-B-04	60.00	19.71	--	--	--	--	--	--	--	--
6-B-01	21.00	27.59	--	--	--	--	--	--	--	--
6-B-02	60.00	78.84	--	--	--	--	--	--	--	--
6-B-03	24.00	52.56	--	--	--	--	--	--	--	--
6-B-04	0.24	0.53	--	--	--	--	--	--	--	--
6-B-05	0.24	0.53	--	--	--	--	--	--	--	--
6-B-06	24.00	52.56	--	--	--	--	--	--	--	--
6-B-07	12.00	26.28	--	--	--	--	--	--	--	--
6-B-08	0.01	0.02	--	--	--	--	--	--	--	--
6-B-09	0.01	0.02	--	--	--	--	--	--	--	--
6-B-10	0.01	0.05	--	--	--	--	--	--	--	--
6-B-11	0.01	0.01	--	--	--	--	--	--	--	--
6-B-12	0.01	0.03	--	--	--	--	--	--	--	--
6-B-13	0.01	0.03	--	--	--	--	--	--	--	--
7-B-01	1.65	7.23	--	--	--	--	--	--	--	--
7-B-02	1.65	7.23	--	--	--	--	--	--	--	--
7-B-03	1.65	7.23	--	--	--	--	--	--	--	--
7-B-04	1.65	7.23	--	--	--	--	--	--	--	--
8-B-01	0.01	0.01	--	--	--	--	--	--	--	--
9-B-01	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-02	0.44	0.11	0.41	0.10	6.20	1.55	0.49	0.12	1.34	0.33
9-B-03	0.75	0.19	0.70	0.17	10.54	2.64	0.84	0.21	2.27	0.57
9-B-04	1.56	0.39	2.52	0.63	22.01	5.50	1.75	0.44	4.74	1.19
9-B-05	1.56	0.39	2.52	0.63	22.01	5.50	1.75	0.44	4.74	1.19
9-B-06	1.56	0.39	2.52	0.63	22.01	5.50	1.75	0.44	4.74	1.19
TOTAL	1716.52	6134.40	19739.2	86415.7	11856.2	51497.6	62.70	240.21	615.60	2603.11

POTENTIAL FACILITY EMISSIONS
SCENARIO III

Emission Unit	PM_{10}		SO_2		NOx		VOC		CO	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
2-B-01	43.81	191.91	79.66	348.91	567.35	2484.99	3.04	13.32	60.36	264.36
2-B-02	0.10	0.42	0.01	0.03	1.27	5.56	0.07	0.31	1.07	4.67
3-B-01	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.0	657.00
3-B-02	548.00	2400.24	6576.0	28802.9	3836.0	16801.7	15.00	65.70	150.0	657.00
4-B-01	212.0	928.56	6576.0	28802.9	3605.0	15789.9	15.00	65.70	150.0	657.00
5-B-01	60.00	19.71	--	--	--	--	--	--	--	--
5-B-02	60.00	19.71	--	--	--	--	--	--	--	--
5-B-03	60.00	19.71	--	--	--	--	--	--	--	--
5-B-04	60.00	19.71	--	--	--	--	--	--	--	--
6-B-01	21.00	27.59	--	--	--	--	--	--	--	--
6-B-02	60.00	78.84	--	--	--	--	--	--	--	--
6-B-03	24.00	52.56	--	--	--	--	--	--	--	--
6-B-04	0.24	0.53	--	--	--	--	--	--	--	--
6-B-05	0.24	0.53	--	--	--	--	--	--	--	--
6-B-06	24.00	52.56	--	--	--	--	--	--	--	--
6-B-07	12.00	26.28	--	--	--	--	--	--	--	--
6-B-08	0.01	0.02	--	--	--	--	--	--	--	--
6-B-09	0.01	0.02	--	--	--	--	--	--	--	--
6-B-10	0.01	0.05	--	--	--	--	--	--	--	--
6-B-11	0.01	0.01	--	--	--	--	--	--	--	--
6-B-12	0.01	0.03	--	--	--	--	--	--	--	--
6-B-13	0.01	0.03	--	--	--	--	--	--	--	--
7-B-01	1.65	7.23	--	--	--	--	--	--	--	--
7-B-02	1.65	7.23	--	--	--	--	--	--	--	--
7-B-03	1.65	7.23	--	--	--	--	--	--	--	--
7-B-04	1.65	7.23	--	--	--	--	--	--	--	--
8-B-01	0.01	0.01	--	--	--	--	--	--	--	--
9-B-01	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-02	0.44	0.11	0.41	0.10	6.20	1.55	0.49	0.12	1.34	0.33
9-B-03	0.75	0.19	0.70	0.17	10.54	2.64	0.84	0.21	2.27	0.57
9-B-04	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-05	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
9-B-06	1.56	0.39	1.46	0.36	22.01	5.50	1.75	0.44	4.74	1.19
TOTAL	1747.49	6270.05	19814.6	86759.3	11950.8	51910.0	56.44	212.82	534.00	2245.69

POTENTIAL FACILITY TOXIC POLLUTANTS EMISSIONS *

Pollutant	Toxicity Category	Emissions		De Minimis Levels	
		lb/hr	TPY	lb/hr	TPY
Acrolein	A	0.20	0.88	0.57	0.60
Arsenic	A	0.29	1.25	0.57	0.60
Beryllium	A	0.01	0.06	0.57	0.60
Cadmium	A	0.04	0.16	0.57	0.60
Chromium	A	0.18	0.79	0.57	0.60
Formaldehyde	A	0.17	0.73	0.57	0.60
Hydrogen Chloride	C	1065.9	4671.24	5.60	6.00
Hydrogen Fluoride	A	132.22	579.46	0.57	0.60
Manganese	C	0.34	1.49	5.60	6.00
Mercury	A	0.30	1.54	0.57	0.60
Nickel	A	1.14	5.02	0.57	0.60

* Worst-case emissions, Scenario III (fuel oil in Boiler 3).

SECTION V. INSIGNIFICANT ACTIVITIES

The insignificant activities identified and justified in the application and listed in OAC 252:100-8, Appendix I, are listed below. Recordkeeping for activities indicated with "*" is listed in the Specific Conditions.

- * Stationary reciprocating engines burning natural gas, gasoline, aircraft fuels, or diesel fuel which are either used exclusively for emergency power generations or for peaking power service not exceeding 500 hours per year. There are four emergency generators and two diesel-powered fire water pumps in this category (EUG No. 9).
- * Emissions from fuel storage/dispensing equipment operated solely for facility owned vehicles if fuel throughput is not more than 2,175 gallons/day, averaged over a 30-day period. The facility has gasoline and diesel fueling operations.
- * Storage tanks with less than or equal to 10,000 gallons capacity that store volatile organic liquids with a true vapor pressure less than or equal to 1.0 psia at maximum storage temperature. There are several small diesel tanks in EUG No. 8 in this category.
- Cold degreasing operations utilizing solvents that are denser than air.
- Welding and soldering operations utilizing less than 100 pounds of solder and 53 tons per year of electrodes. These activities are conducted as a part of routine maintenance and are considered trivial activities. Recordkeeping will not be required in the Specific Conditions.
- Hazardous waste and hazardous materials drum staging areas.
- Sanitary sewage collection and treatment facilities other than incinerators and Publicly Owned Treatment Works (POTW). Stacks or vents for sanitary sewer plumbing traps are also included (i.e., lift station).

- Exhaust systems for chemical, paint, and/or solvent storage rooms or cabinets, including hazardous waste satellite (accumulation) areas. The facility includes a chemical storage area for the maintenance operations.
- Hand wiping and spraying of solvents from containers with less than 1 liter capacity used for spot cleaning and/or degreasing in ozone attainment areas.

- * Activities having the potential to emit no more than 5 TPY (actual) of any criteria pollutant.

Fugitive emissions from the following operations are below 5 TPY:

Rotary Coal Car Dumper	Fly Ash Silos
Coal Stacker Tower	Auxiliary Boiler (Scenario I & II)
Coal Reclaim	Coal Surge Bin
Coal Crusher Tower	Coal Transfer Tower

SECTION VI. OKLAHOMA AIR POLLUTION CONTROL RULES

OAC 252:100-1 (General Provisions) [Applicable]
Subchapter 1 includes definitions but there are no regulatory requirements.

OAC 252:100-3 (Air Quality Standards and Increments) [Applicable]
Subchapter 3 enumerates the primary and secondary ambient air quality standards and the significant deterioration increments. At this time, all of Oklahoma is in attainment of these standards.

OAC 252:100-4 (New Source Performance Standards) [Applicable]
Federal regulations in 40 CFR Part 60 are incorporated by reference as they exist on July 1, 2000, except for the following: Subpart A (Sections 60.4, 60.9, 60.10, and 60.16), Subpart B, Subpart C, Subpart Ca, Subpart Cb, Subpart Cc, Subpart Cd, Subpart Ce, Subpart AAA, and Appendix G. Compliance with these regulations is discussed in the "Federal Regulations" section.

OAC 252:100-5 (Registration, Emission Inventory, and Annual Fees) [Applicable]
The owner or operator of any facility that is a source of air emissions shall submit a complete emission inventory annually on forms obtained from the Air Quality Division. Emission inventories were submitted and fees paid for previous years as required.

OAC 252:100-7 (Permits for Minor Facilities) [Not Applicable]
Subchapter 7 sets forth the permit application fees and the basic substantive requirements for permits for minor facilities. However, Subchapter 7 previously contained the requirements for construction and operation of major sources also. The plant is currently operating under Permit No. 77-084-O and will be superceded by this permit.

OAC 252:100-8 (Operating Permits (Part 70)) [Applicable]
This facility meets the definition of a major source since it has the potential to emit regulated pollutants in excess of 100 TPY. As such, a Title V (Part 70) operating permit is required. Any planned changes in the operation of the facility which result in emissions not authorized in the permit and which exceed the "Insignificant Activities" or "Trivial Activities" thresholds require prior notification to AQD and may require a permit modification. Insignificant activities mean individual emission units that either are on the list in Appendix I or whose actual calendar year emissions do not exceed the following limits:

- 5 TPY of any one criteria pollutant, 2 TPY of any one hazardous air pollutant (HAP) or 5 TPY of multiple HAPs or 20% of any threshold less than 10 TPY for a HAP that the EPA may establish by rule
- 0.6 TPY of any one Category A toxic substance
- 1.2 TPY of any one Category B toxic substance
- 6.0 TPY of any one Category C toxic substance

Emissions limitations from the existing permit for Unit 6 will be repeated in this permit. The PSD permit for Unit 6 overlooked the coal processing equipment; limitations for those units will be incorporated into this permit.

OAC 252:100-9 (Excess Emission Reporting Requirements) [Applicable]
In the event of any release which results in excess emissions, the owner or operator of such facility shall notify the Air Quality Division as soon as practical during normal office hours and no later than 4:30 pm the next working day following the malfunction or release. Within ten (10) business days further notice shall be tendered in writing containing specific details of the incident. Part 70 sources must report any exceedance that poses an imminent and substantial danger to public health, safety, or the environment as soon as is practicable; but under no circumstances shall notification be more than 24 hours after the exceedance.

OAC 252:100-13 (Prohibition of Open Burning) [Applicable]
Open burning of refuse and other combustible material is prohibited except as authorized in the specific examples and under the conditions listed in this subchapter.

OAC 252:100-19 (Particulate Matter) [Applicable]
This subchapter specifies limits for fuel-burning equipment particulate emissions based on heat input capacity. Emissions limitations and anticipated emissions are tabulated following. Emissions listed for the boilers are based on the allowable emissions. All units are in compliance with Subchapter 19.

COMPLIANCE WITH OAC 252:100-19

Emission Unit	Description	Capacity, MMBTUH	Allowable PM Emissions, lb/hr	Calculated PM Emissions, lb/hr	
				Scenario I & II	Scenario III
2-B-01	Boiler 3	1690	169.00	12.84	43.81
2-B-02	Auxiliary boiler	12.7	6.35	0.10	0.10
3-B-01	Boiler 4	5480	548.00	103.5	103.5
3-B-02	Boiler 5	5480	548.00	103.5	103.5
4-B-01	Boiler 6	5480	548.00	212.00	212.00
9-B-04	Engine	5.7	3.41	1.56	1.56
9-B-06	Engine	5.7	3.41	1.56	1.56

Expected PM emissions from Boilers 4 and 5 were calculated based on a coal feed rate of 300 TPH, an average ash content of 5%, AP-42 (9/98) Section 1.1 uncontrolled emission factor of "2.3*A" for pulverized coal units, and a control efficiency of 97%.

Subchapter 19 also limits PM emissions from various processes excluding fuel-burning equipment and fugitive emissions. Limitations are specified based on process weight rate. Emissions limitations and anticipated emissions are tabulated following. All units are in compliance with Subchapter 19.

COMPLIANCE BY MINOR PM EMISSION UNITS WITH OAC 252:100-19

Process Point	Process Rate, TPH	Allowable PM Emission Rate, lb/hr	Controlled Emission Rate, lb/hr
6-B-04	1200	80.0	0.24
6-B-05	1200	80.0	0.24
6-B-08	600	71.2	0.01
6-B-09	600	71.2	0.01
6-B-10	300	63.0	0.01
6-B-11	300	63.0	0.01
6-B-12	300	63.0	0.01
6-B-13	300	63.0	0.01
7-B-01	15	25.2	1.65
7-B-02	15	25.2	1.65
7-B-03	15	25.2	1.65
7-B-04	15	25.2	1.65

The controlled emission rates show that the facility is in compliance with Subchapter 19.

OAC 252:100-25 (Visible Emissions and Particulates) [Applicable]
No discharge of greater than 20% opacity is allowed except for short-term occurrences which consist of not more than one six-minute period in any consecutive 60 minutes, not to exceed three such periods in any consecutive 24 hours. In no case shall the average of any six-minute period exceed 60% opacity. Any unit which is subject to an NSPS opacity limitation is not subject to Subchapter 25; this would include Units 4, 5, and 6 and the coal processing equipment in EUG 6B. All other emissions units are subject to Subchapter 25. The permit will require weekly observation of the coal processing equipment, and daily observations of the Boiler 3 stack whenever fuel oil is burned; the permit will require opacity testing to be conducted using Method 22 initially, and if any visible emissions are observed, using Method 9. When burning fuel oil in Boiler 3, the permit will require Method 22 and then Method 9 if visible emissions are detected. The permit will also include reduced visible emission observation requirements when burning fuel oil if no visible emissions are detected or if visible emissions observations using Method 9 are below the 20 % opacity limitation.

OAC 252:100-29 (Fugitive Dust) [Applicable]
No person shall cause or permit the discharge of any visible fugitive dust emissions beyond the property line on which the emissions originate in such a manner as to damage or to interfere with the use of adjacent properties, or cause air quality standards to be exceeded, or interfere with the maintenance of air quality standards. Water sprays and enclosures are used on conveyor transfer points and stockpiles to minimize emissions of fugitive dust as required by Subchapter 29.

OAC 252:100-31 (Sulfur Compounds) [Applicable]
Part 3 establishes short-term ambient standards for SO_2. Air dispersion modeling of the entire facility was conducted as part of its PSD permit application for Unit 6. The application assumed a maximum coal sulfur content of approximately 0.6% for all coal-fired boilers. Results of the modeling are tabulated following. All ambient SO_2 impacts are in compliance with the limitations of Subchapter 31.

SO_2 AMBIENT IMPACTS

Averaging Time	Subchapter 31 Limitation, ug/m^3	Maximum Facility Ambient Impacts, ug/m^3
3 hours	650	305
24 hours	130	55
Annual	80	5.0

Part 5 specifies limitations of SO_2 emissions from new fuel-burning equipment. Units 4, 5, and 6 are subject to these standards; Unit 3 was constructed prior to the effective date of Subchapter 31. Solid-fueled units are limited to 1.2 lb/MMBTU SO_2 emissions. Emissions monitoring as required by NSPS, Subpart D has shown compliance with this rule. Engines 9-B-04 and 9-B-06, liquid fueled units, are subject to a limitation of 0.8 lb/MMBTU SO_2. Using No. 2 diesel with 0.5% or less sulfur, SO_2 emissions will be 0.5 lb/MMBTU or less. These emissions are in compliance with Subchapter 31.

OAC 252:100-33 (Nitrogen Oxides) [Applicable]
This subchapter limits NOx emissions from new solid fuel-burning equipment with a rated heat input greater than 50 MMBTUH to 0.7 lb/MMBTU. This standard is applicable to Boilers 4, 5, and 6 but not to Boiler 3, which predated this rule, nor to the Auxiliary Boiler, which is smaller than the 50 MMBTUH threshold. The PSD permit for Boiler 6 specifies an identical emission limitation to Subchapter 33 and to NSPS, Subpart D. Emissions monitoring has shown compliance with the applicable emissions limitations.

OAC 252:100-37 (VOC) [Applicable]
Part 3 requires storage tanks with a capacity of 400 gallons or more and containing a VOC with a vapor pressure greater than 1.5 psia to be equipped with a permanent submerged fill pipe or with an organic vapor recovery system. The 2,000-gallon gasoline tank predated the submerged fill requirement. The 40,000-gallon fuel oil storage tank, emergency generator fuel tanks, and diesel vehicle fuel tank have vapor pressures of 0.01 psia, therefore these requirements are not applicable.
Part 5 limits the VOC content of coatings used in coating lines or operations. This facility does not normally conduct coating or painting operations except for routine maintenance of the facility and equipment which is exempt.
Part 7 requires fuel-burning equipment to be operated and maintained so as to minimize emissions. Temperature and available air must be sufficient to provide essentially complete combustion.

OAC 252:100-41 (Hazardous and Toxic Air Contaminants) [Applicable]
Part 3 addresses hazardous air contaminants. NESHAP, as found in 40 CFR Part 61, are adopted by reference as they exist on July 1, 2000, with the exception of Subparts B, H, I, K, Q, R, T, W and Appendices D and E, all of which address radionuclides. In addition, General Provisions as found in 40 CFR Part 63, Subpart A, and the Maximum Achievable Control Technology (MACT) standards as found in 40 CFR Part 63, Subparts F, G, H, I, L, M, N, O, Q, R, S, T, U, W, X, Y, CC, DD, EE, GG, HH, II, JJ, LL, KK, OO, PP, QQ, RR, SS, TT, UU, VV, WW, YY, CCC, DDD, EEE, GGG, HHH, III, JJJ, LLL, MMM, NNN, OOO, PPP, RRR, TTT, VVV, and XXX are hereby adopted by reference as they exist on July 1, 2000. These standards apply to both existing and new sources of HAPs. These requirements are addressed in the Federal Regulations Section.

Part 5 is a state-only requirement governing toxic air contaminants. New sources (constructed after March 9, 1987) emitting any category "A" pollutant above de minimis levels must perform a BACT analysis. All sources are required to demonstrate that emissions of any toxic air contaminant which exceeds the de minimis level does not cause or contribute to a violation of the MAAC.

Dispersion modeling has been conducted using the EPA SCREEN3 model. Calculated 1-hour averages were then converted to 24-hour averages by multiplying by the transform factor 0.4. The following table shows that impacts are in compliance with Subchapter 41.

MAAC COMPLIANCE

Pollutant	Toxicity Category	MAAC (µg/m³)	Max. Downwind Impact (µg/m³)
Acrolein	A	2.0	0.0074
Arsenic	A	0.02	0.0107
Beryllium	A	0.02	0.0004
Cadmium	A	0.5	0.0004
Chromium	A	0.25	0.0066
Formaldehyde	A	12	0.0063
Hydrogen Chloride	C	700	39.357
Hydrogen Flouride	A	50	4.8834
Manganese	C	100	0.0004
Mercury	A	0.5	0.0024
Nickel	A	0.15	0.0350

OAC 252:100-43 (Sampling and Testing Methods) [Applicable]
All tests shall be made and the results calculated in accordance with test procedures described or referenced in the Specific Conditions of the permit and approved by Air Quality. All tests shall be made under the direction of a person qualified by training and/or experience in the field of air pollution control.

This permit includes a request to utilize Method 7471A from SW-846, "Test Methods for Evaluating Solid Waste." OG&E's request to use this method to determine mercury content of sludges was forwarded to EPA Region VI with approval granted on September 28, 2000.

OAC 252:100-45 (Monitoring of Emissions) [Applicable]
Records and reports as Air Quality shall prescribe on air contaminants or fuel shall be recorded, compiled, and submitted as specified in the permit.

The following Oklahoma Air Pollution Control Rules are not applicable to this facility:

OAC 252:100-11	Alternative Reduction	not eligible
OAC 252:100-15	Mobile Sources	not in source category
~~OAC 252:100-17~~	~~Incinerators~~	~~not type of emission unit~~
OAC 252:100-23	Cotton Gins	not type of emission unit
OAC 252:100-24	Feed & Grain Facility	not in source category
OAC 252:100-39	Nonattainment Areas	not in a subject area
OAC 252:100-47	Landfills	not type of emission unit

SECTION VII. FEDERAL REGULATIONS

PSD, 40 CFR Part 52 [Not Applicable at this Time]
Unit 6 commenced construction after the effective date of PSD. (The remainder of the facility began construction prior to the effective date of the PSD regulations and is not currently subject to PSD limitations.) A PSD permit was issued by EPA Region VI on September 25, 1978. Any future emission increases must be evaluated for PSD if they exceed a significance level (100 TPY CO, 40 TPY NO_x, 40 TPY SO_2, 40 TPY VOC, 25 TPY PM, 15 TPY PM_{10}, or 0.6 TPY lead).

NSPS, 40 CFR Part 60 [Subparts D and Y Are Applicable]
Subpart D (Fossil-Fuel-Fired Steam Generators) is applicable to steam generating units constructed after August 17, 1971, which have a capacity greater than 250 MMBTU/hr heat input. Boilers No. 4, 5, and 6 each has a heat input rate of 5,480 MMBTUH and commenced construction in 1972, 1972, and 1978, respectively, therefore are subject to the emissions limitations and emissions monitoring standards. Boiler 3 commenced construction prior to August 17, 1971. The Auxiliary Boiler (12.7 MMBTUH) is smaller than the 250 MMBTUH threshold.
Subpart K (VOL Storage Vessels) The 40,000-gallon fuel oil tank was installed in 1956 which is prior to the applicable time period of June 11, 1973 to May 19, 1978.
Subpart Kb (VOL Storage Vessels) The 2,000-gallon gasoline tank is below the 10,567-gallon threshold for this Subpart.
Subpart Y (Coal Preparation Plants) This facility handles 7,200 tons of coal per day, and has coal storage systems and coal processing and conveying equipment, which are defined as affected sources per 40 CFR 60.250(a). The coal processing equipment for Unit 6 was constructed after 1978, therefore, Subpart Y affects that part of the facility. The remainder of the coal processing and handling equipment was constructed in 1972, so Subpart Y is not applicable to that part of the facility.

NESHAP, 40 CFR Part 61 [Applicable]
Subpart E (Mercury Emissions) affects combustion of water treatment sludge, limiting mercury emissions to 3,200 grams per day from any such operation. The applicant has requested permission to use an alternative method of testing sludge from the method specified in 40 CFR 61.54. OG&E has attempted to find a laboratory capable of performing this method, but has not been able to find one. They have requested use of SW-846 Method 7471A. Alternative testing methods are allowed under 40 CFR 61.13. The Specific Conditions will allow use of the alternative method.

NESHAP, 40 CFR Part 63 [Not Applicable At This Time]
There is no current standard that applies to this facility. However, there is a schedule for MACT standards under 40 CFR 63 which may affect the boilers in the facility: Subpart DDDDD, "Industrial-Commercial-Institutional Boilers and Process Heaters" due by March 2002. Air Quality reserves the right to reopen this permit if any of these standards become applicable.

CAM, 40 CFR Part 64 [Not Applicable at this Time]
Under 40 CFR 64.2(b), CAM does not affect Acid Rain standards. Compliance Assurance Monitoring, as published in the Federal Register on October 22, 1997, applies to any pollutant specific emission unit at a major source, that is required to obtain a Title V permit, if it meets all the following criteria:

- It is subject to an emission limit or standard for an applicable regulated air pollutant.
- It uses a control device to achieve compliance with the applicable emission limit or standard.
- It has potential emissions, prior to the control device, of the applicable regulated air pollutant greater than major source levels.

This application was submitted before April 28, 1998. The operator has until renewal of their Title V permit to comply with applicable monitoring standards.

Chemical Accident Prevention Provisions, 40 CFR Part 68 [Not Applicable]
This facility does not store any regulated substance above the applicable threshold limits. More information on this federal program is available at the web site: http://www.epa.gov/ceppo/.

Acid Rain Permit Requirements, 40 CFR Part 72 [Applicable]
Acid Rain Permit No. 97-136-AR (M-1) was issued on January 6, 1998, which satisfies the permit requirements.

Acid Rain Monitoring Requirements, 40 CFR Part 75 [Applicable]
Boilers 3, 4, 5, and 6 are Phase II Acid Rain units. Continuous emissions monitoring systems (CEMS) were certified on December 16-19, 1994, for Units 4, 5, and 6. Under Scenarios I and II (gas fuel only), Boiler 3 is required to monitor NOx and CO_2 emissions, while under Scenario III the unit is required to monitor fuel (sulfur content and usage rates) along with NOx and CO_2.

Stratospheric Ozone Protection, 40 CFR Part 82 [Applicable]
This facility does not produce, consume, recycle, import, or export any controlled substances or controlled products as defined in this part, nor does this facility perform service on motor (fleet) vehicles which involve ozone-depleting substances. Therefore, as currently operated, this facility is not subject to these requirements. To the extent that the facility has air-conditioning units that apply, the permit requires compliance with Part 82.

SECTION VIII. COMPLIANCE

Inspection

A compliance inspection was conducted on March 8, 2000, by Ms. Roxanne Roberts of the Regional Office at Tulsa. The inspection indicated that the facility was operating as described in the permit application and supplemental materials, and that all emission units were in compliance with all applicable regulations.

Testing

The facility continues to monitor emissions as required by NSPS and 40 CFR 75 (acid rain) and conducts annual testing of the equipment for verification. Air Quality observations have shown testing of the continuous emission monitors have been conducted properly. CEMs data is submitted to EPA Headquarters on a quarterly basis as required by the Acid Rain Program.

Method 9 performance testing was conducted on the Unit No. 6 coal processing system on May 1, 2000.

Tier Classification And Public Review

The applicant has submitted an affidavit that they are not seeking a permit for land use or for any operation upon land owned by others without their knowledge. The affidavit certifies that the applicant owns the real property.

The permit has been determined to be a Tier II based on being a major facility for which a Title V permit is required. The Notice of Filing was published in the *Muskogee Daily Phoenix* on March 5, 1997. The notice stated that the application was available for review at the OG&E district office, 302 N. 7th Street, Muskogee, OK. The draft permit was also made available for public review by another published notice, on May 21, 2001, in the *Muskogee Daily Phoenix*. The facility is located within 50 miles of the Oklahoma-Arkansas border; the state of Arkansas was notified of the draft permit. Public review was concluded with no comments received from the public, the state of Arkansas, or EPA Region VI.

Information on all permit actions is available for review by the public in the Air Quality section of the DEQ Web page:*http://www.deq.state.ok.us/.*

Fees Paid

Part 70 source operating permit fee of $2,000.

SECTION IX. SUMMARY

The applicant has demonstrated compliance with all applicable Air Quality rules and regulations. Ambient air quality standards are not threatened at this site. The Compliance and Enforcement Units concur with issuance of this permit. Issuance of the permit is recommended.